

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An inking and doctor unit [(3)] for a rotogravure print and spread cylinder, comprising a casing [(13)]; a doctor assembly [(14)] including a doctor [(24)] fitted to a doctor carrier [(25)]; and an inking chamber ~~(15)~~ bounded for containing ink to be applied to a print cylinder, the inking chamber being formed by a concave inner surface [(13a)] of the casing [(13)] and at least partly by the doctor assembly [(14)]; the casing [(13)] and the doctor assembly [(14)] forming a box body [(18)] closed except for one side engaging in use [a] the print cylinder [(2)]; characterized in that the doctor [(24)] is mounted to lie flat with respect to a lateral surface [(11)] of the print cylinder [(2)], when the box body [(18)] engages the print cylinder [(2)]; and in that the doctor carrier [(25)] comprises a rocking support [(27)] rotating about a regulating axis [(C)] parallel in use to an axis of rotation [(A)] of the print cylinder [(2)]; and a slide [(28)] integral with the doctor [(24)] and which slides on the support [(27)].

2. (Currently Amended) A unit as claimed in Claim 1, characterized by comprising first sealing means ~~(21, 21a, 22, 22a, 19a, 20a)~~ for hermetic connection to the print cylinder [(2)].

3. (Currently Amended) A unit as claimed in Claim 2, characterized in that the first sealing means ~~(21, 21a, 22, 22a)~~ are flat-surface sealing means designed to engage opposite end surfaces [(10)] of the print cylinder [(2)].

4. (Currently Amended) A unit as claimed in Claim 3, characterized in that said first sealing means ~~(21, 21a, 22, 22a)~~ comprise a first and second plate ~~(21, 22)~~ fitted at opposite ends of the casing [(13)] and having respective sealing edges ~~(21a, 22a)~~ facing each other and

arranged to slide on respective said end surfaces $[(10)]$ when the box body $[(18)]$ engages the print cylinder $[(2)]$.

5. (Currently Amended) A unit as claimed in Claim 4, characterized in that the first and second plate $(21, 22)$ are movable with respect to the casing $[(13)]$; and by comprising elastic means $(21b, 22b; 50)$ associated with the first and second plate $[(21, 22)]$ to press the first and second plate $(21, 22)$ against respective said end surfaces $[(10)]$ when the box body $[(18)]$ engages the print cylinder $[(2)]$.

6. (Currently Amended) A unit as claimed in Claim 2, characterized in that the first sealing means $(19a, 20a)$ are radial sealing means shaped to engage the lateral surface $[(11)]$ of the print cylinder $[(2)]$.

7. (Currently Amended) A unit as claimed in Claim 6, characterized in that the first sealing means $(19a, 20a)$ are carried by the casing $[(13)]$, at opposite ends of the doctor assembly $[(14)]$, and comprise sealing edges $(19a, 20a)$ of the casing $[(13)]$ shaped to slide on the lateral surface $[(11)]$ of the print cylinder $[(2)]$ along at least a predetermined arc, when the box body $[(18)]$ engages the print cylinder $[(2)]$.

8. (Currently Amended) A unit as claimed in Claim 1, characterized by comprising second sealing means $(34, 35, 36)$ between the doctor assembly $[(14)]$ and the casing $[(13)]$.

9. (Currently Amended) A unit as claimed in Claim 8, characterized in that the second sealing means $(34, 35, 36)$ comprise seals $(34, 35)$ located at opposite ends of the doctor assembly $[(14)]$, flush with a first and second lateral wall $(19, 20)$ respectively of the casing $[(13)]$.

10. (Currently Amended) A unit as claimed in Claim 9, characterized in that the second sealing means ~~(34, 35, 36)~~ comprise pads ~~[(36)]~~ made of low-friction material, incorporated in the first and second lateral wall ~~(19, 20)~~ of the casing ~~[(13)]~~, and located at opposite ends of the doctor assembly ~~[(14)]~~; and pressure means ~~(37, 38)~~ for pressing the pads ~~[(36)]~~ against the opposite ends of the doctor assembly ~~[(14)]~~.

11. (Currently Amended) A unit as claimed in Claim 1, characterized by comprising third sealing means ~~(32, 33)~~ between a sealing surface ~~[(28a)]~~ of the doctor assembly ~~[(14)]~~, extending continuously along the whole width of the doctor assembly ~~[(14)]~~, and an edge ~~[(13b)]~~ of the casing ~~[(13)]~~ adjacent to the sealing surface ~~[(28a)]~~.

12. (Currently Amended) A unit as claimed in Claim 1, characterized in that the doctor ~~[(24)]~~ is fitted to the doctor carrier ~~[(25)]~~ for resting in use on the lateral surface ~~[(11)]~~ of the print cylinder ~~[(2)]~~ along a doctor line ~~[(R)]~~; the doctor ~~[(24)]~~ forming an acute angle with a plane tangent to the lateral surface ~~[(11)]~~ of the print cylinder ~~[(2)]~~ along the doctor line ~~[(R)]~~, on the ink ~~[(12)]~~ feed side.

13. (Currently Amended) A unit as claimed in Claim 1, characterized by comprising actuating members ~~[(30)]~~ for moving the slide ~~[(28)]~~ with respect to the support ~~(27a; 13e)~~.

14. (Currently Amended) A unit as claimed in Claim 1, characterized by comprising an inking roller ~~[(16)]~~ housed inside the inking chamber ~~[(15)]~~ with an axis ~~[(B)]~~ of rotation parallel to the axis of rotation ~~[(A)]~~ of the print cylinder ~~[(2)]~~ for pressing ink ~~[(12)]~~ collected inside the inking chamber ~~[(15)]~~ against the lateral surface ~~[(11)]~~ of the print cylinder ~~[(2)]~~.

15. (Currently Amended) An inking and doctor unit for a rotogravure print and spread cylinder, comprising a casing; a doctor assembly including a doctor fitted to a doctor carrier; and an inking chamber bounded by a concave inner surface of the casing and at least partly by the doctor assembly; the casing and the doctor assembly forming a box body closed except for one side engaging in use a print cylinder; characterized in that the doctor is mounted to lie flat with respect to a lateral surface of the print cylinder when the box body engages the print cylinder; and in that the doctor carrier comprises a rocking support rotating about a regulating axis parallel in use to an axis of rotation of the print cylinder; and a slide integral with the doctor and which slides on the support, A unit as claimed in Claim 1, characterized by comprising a hood [(17)] designed to define, in use, a wetting chamber [(39)] about a portion of the lateral surface [(11)] of the print cylinder [(2)] extending substantially between a print area [(8)] and the inking chamber [(15)].

16. (Currently Amended) A unit as claimed in Claim 15, characterized by comprising first and second feed means [(6, 7)] for feeding a wetting fluid and a cleaning fluid respectively into the hood [(17)].

17. (Currently Amended) A rotogravure print and spread assembly [(1)] comprising a print cylinder [(2)] having an axis of rotation [(A)]; characterized by comprising an inking and doctor unit [(3)] as claimed in Claim 1.

18. (Currently Amended) An assembly as claimed in Claim 17, characterized by comprising actuating means [(4)] for adjusting the relative position of the inking and doctor unit [(3)] with respect to the print cylinder [(2)].

19. (Currently Amended) A rotogravure print and spread assembly comprising:

a print cylinder having an axis of rotation;

an inking and doctor unit, comprising a casing; a doctor assembly including a doctor fitted to a doctor carrier; and an inking chamber bounded by a concave inner surface of the casing and at least partly by the doctor assembly; the casing and the doctor assembly forming a box body closed except for one side engaging in use the print cylinder; characterized in that the doctor is mounted to lie flat with respect to a lateral surface of the print cylinder when the box body engages the print cylinder; and in that the doctor carrier comprises a rocking support rotating about a regulating axis parallel in use to an axis of rotation of the print cylinder; and a slide integral with the doctor and which slides on the support; and

actuating means for adjusting the relative position of the inking and doctor unit with respect to the print cylinder, comprising ~~An assembly as~~ claimed in Claim 18, characterized in that the actuating means (4) comprise rotary actuating means ~~(40, 45)~~ for rotating the inking and doctor unit ~~[(3)]~~ about the axis of rotation ~~[(A)]~~ of the print cylinder ~~[(2)]~~.

20. (Currently Amended) A rotogravure print and spread assembly comprising:

a print cylinder having an axis of rotation;

an inking and doctor unit, comprising a casing; a doctor assembly including a doctor fitted to a doctor carrier; and an inking chamber bounded by a concave inner surface of the casing and at least partly by the doctor assembly; the casing and the doctor assembly forming a box body closed except for one side engaging in use the print cylinder;

characterized in that the doctor is mounted to lie flat with respect to a lateral surface of the print cylinder when the box body engages the print cylinder; and in that the doctor carrier comprises a rocking support rotating about a regulating axis parallel in use to an axis of rotation of the print cylinder; and a slide integral with the doctor and which slides on the support; and

actuating means for adjusting the relative position of the inking and doctor unit with respect to the print cylinder, comprising ~~An assembly as elaimed in Claim 18, characterized in that the actuating means (4) comprise~~ first translatory actuating means ~~[[41]]~~ for translating the inking and doctor unit ~~[[3]]~~ in a first direction substantially perpendicular to the axis of rotation ~~[[A]]~~; and second translatory actuating means ~~[[4]]~~ for translating the inking and doctor unit ~~[[3]]~~ in a second direction substantially parallel to the axis of rotation ~~[[A]]~~.